

**Title of Instructional Materials:** Connected Mathematics

**Grade Level:** Grade 6

**Reviewers:**

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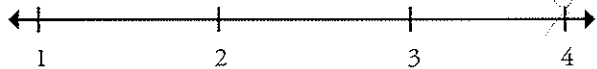
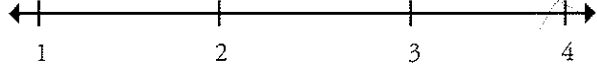
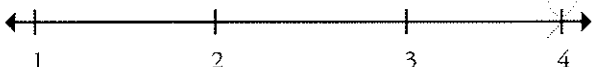
## Summary of Connected Mathematics

<p><b>Overall Rating:</b></p> <p><input checked="" type="checkbox"/> Weak (1-2) <input type="checkbox"/> Moderate (2-3) <input type="checkbox"/> Strong (3-4)</p> <p><b>Summary / Justification / Evidence:</b> Inquiry-based program; dependent on fraction bar model. Some standard areas are missing.</p>	<p><b>Important Mathematical Ideas:</b></p> <p><input type="checkbox"/> Weak (1-2) <input checked="" type="checkbox"/> Moderate (2-3) <input type="checkbox"/> Strong (3-4)</p> <p><b>Summary / Justification / Evidence:</b></p>
<p><b>Skills and Procedures:</b></p> <p><input checked="" type="checkbox"/> Weak (1-2) <input type="checkbox"/> Moderate (2-3) <input type="checkbox"/> Strong (3-4)</p> <p><b>Summary / Justification / Evidence:</b></p>	<p><b>Mathematical Relationships:</b></p> <p><input type="checkbox"/> Weak (1-2) <input checked="" type="checkbox"/> Moderate (2-3) <input type="checkbox"/> Strong (3-4)</p> <p><b>Summary / Justification / Evidence:</b></p>

Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_


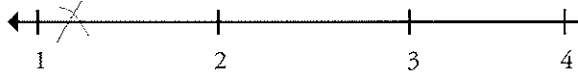
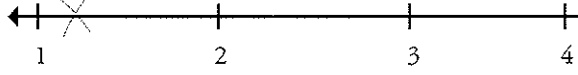
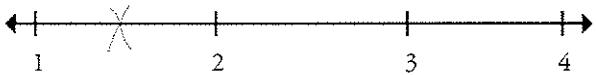
**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.1</b></p> <p>Interpret and compute <u>quotients of fractions</u>, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for <math>(2/3) \div (3/4)</math> and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that <math>(2/3) \div (3/4) = 8/9</math> because <math>3/4</math> of <math>8/9</math> is <math>2/3</math>. (In general, <math>(a/b) \div (c/d) = ad/bc</math>.)</i> How much chocolate will each person get if 3 people share <math>1/2</math> lb of chocolate equally? How many <math>3/4</math>-cup servings are in <math>2/3</math> of a cup of yogurt? How wide is a rectangular strip of land with length <math>3/4</math> mi and area <math>1/2</math> square mi?</p> <p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p> <p>9-1 9-3 9-4 9-5</p>	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b></p> <p>• STUDENTS DIVIDE FRACTIONS BY FINDING THE RECIPROCAL, THEN MULTIPLYING THE NUMERATORS AND DENOMINATORS TO GET THE QUOTIENT OF FRACTIONS.</p> <p>• HAVE RELATED WORD PROBLEMS</p> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p><b>Overall Rating</b> </p>

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*Dr. J. B. Smith*

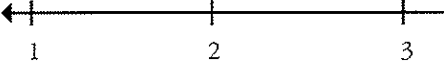
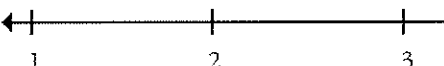
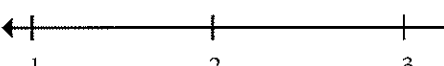
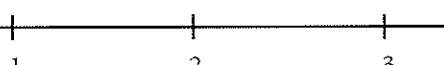
**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

<p><b>Compute fluently with multi-digit numbers and find common factors and multiples.</b></p>	<p><b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b></p>
<p><b>6.NS.2</b></p> <p>Fluently divide multi-digit numbers using the standard algorithm.</p>          <p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p> <p>3-4</p>	<p>Important Mathematical Ideas </p> <p>Skills and Procedures </p> <p>Mathematical Relationships </p> <p><b>Summary / Justification / Evidence</b></p> <p>' DIVISION OF MULTI-DIGIT DECIMALS ONLY</p>
	<p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p>' NO DIVISION OF WHOLE NUMBERS BY WHOLE NUMBER.</p>
	<p><b>Overall Rating</b> </p>

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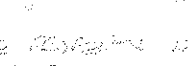

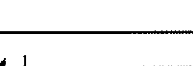


**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

<p><b>Compute fluently with multi-digit numbers and find common factors and multiples.</b></p>	<p><b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b></p>
<p><b>6.NS.3</b></p> <p>Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p>       <p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p> <p>3-2 3-5 3-6 3-7 3-8 3-10 2-5</p>	<div style="margin-bottom: 10px;"> <p>Important Mathematical Ideas </p> </div> <div style="margin-bottom: 10px;"> <p>Skills and Procedures </p> </div> <div style="margin-bottom: 10px;"> <p>Mathematical Relationships </p> </div> <p><b>Summary / Justification / Evidence</b></p> <p>STUDENTS ADD, SUBTRACT, MULTIPLY AND DIVIDE DECIMALS AS WELL AS WHOLE NUMBERS</p>
	<p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p>
	<p><b>Overall Rating</b> </p>

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John

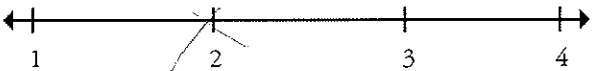


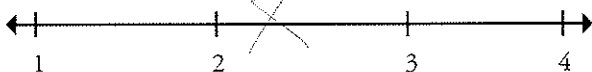
**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

<p><b>Compute fluently with multi-digit numbers and find common factors and multiples.</b></p>	<p><b>6.NS.4</b></p>	<p>Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express <math>36 + 8</math> as <math>4(9 + 2)</math>.</i></p>	<p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p> <p>5-3 &gt; GCF 5-6 : 7-2 - LCM</p> <p>DIST. PROP - pp. 40-41, 92 (2-4)</p>	<p><b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b></p>	<p>Important Mathematical Ideas </p> <p>Skills and Procedures </p> <p>Mathematical Relationships </p> <p><b>Summary / Justification / Evidence</b></p> <ul style="list-style-type: none"> <li>STUDENTS FIND GCF USING PRIME FACTORIZATION &amp; TREE METHOD</li> <li>" " " LCM " " " JIS</li> <li>STUDENTS USE DISTRIBUTIVE PROPERTY IN A VARIETY OF WAYS (BUT NOT WITH A COMMON FACTOR AS SHOWN.)</li> </ul>	<p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b> </p>	<p><b>Overall Rating</b> </p>
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Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_


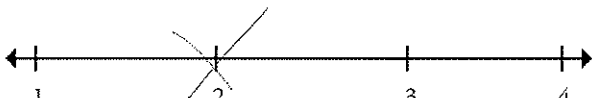
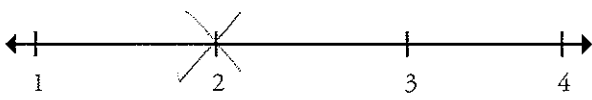
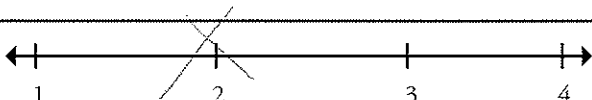
**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

Apply and extend previous understandings of numbers to the system of rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.5</b></p> <p>Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p> <p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p> <p>10-1</p>	<p><b>Important Mathematical Ideas</b></p>  <p><b>Skills and Procedures</b></p>  <p><b>Mathematical Relationships</b></p>  <p><b>Summary / Justification / Evidence</b></p> <ul style="list-style-type: none"> <li>• POS/NEG NUMBERS TAUGHT/SHOWN TO HAVE OPPOSITE VALUES</li> <li>• POSITIVE NUMBERS USED TO REPRESENT REAL-WORLD SITUATIONS</li> </ul> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <ul style="list-style-type: none"> <li>• LIMITED EXAMPLES/CONCEPTUALIZATION OF +/-</li> <li>• EXPLANATION OF ZERO LESS THAN ADEQUATE</li> </ul> <p><b>Overall Rating</b></p> 

Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

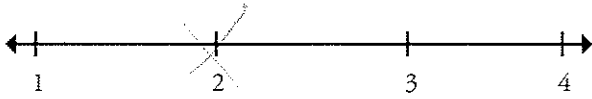
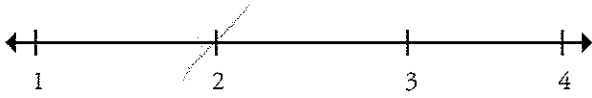
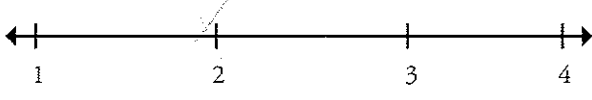

Apply and extend previous understandings of numbers to the system of rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.6a</b></p> <p>6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., <math>-(-3) = 3</math>, and that 0 is its own opposite.</p> <p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p> <p>10-1 10-7</p>	<p><b>Important Mathematical Ideas</b></p>  <p><b>Skills and Procedures</b></p>  <p><b>Mathematical Relationships</b></p>  <p><b>Summary / Justification / Evidence</b></p> <ul style="list-style-type: none"> <li>• ONE EXAMPLE SHOWING 2 AND -2 AS EQUAL DISTANCES FROM ZERO</li> <li>• EXAMPLE SHOWS THAT <math>-(-3)</math> IS READ "THE OPPOSITE OF NEGATIVE THREE" WHICH ARE EQUAL BUT THIS EQUALS "3"</li> </ul> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p>• STUDENTS ARE NEVER ASKED TO SHOW THAT THE ADDITIVE INVERSE NUMBERS W/ EQUAL VALUES AND OPPOSITES SIGN ARE OPPOSITES ON A NUMBER LINE (E.G. 5 AND -5)</p> <p><b>Overall Rating</b></p> 



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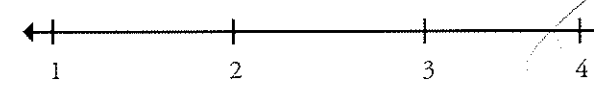
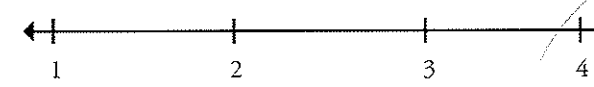

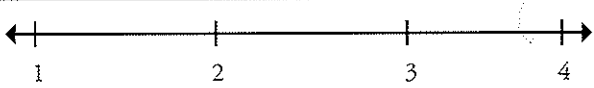
Title of Instructional Materials: \_\_\_\_\_

**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

Apply and extend previous understandings of numbers to the system of rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.6b</b></p> <p>6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p> <p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p> <p>10-7 NO 10-9</p>	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b></p> <p>Students are exposed to four quadrants and asked to plot ordered pairs.</p>
	<p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p>Rules for four quadrants only, no need to plot a reflection of points at differing signs across x- and y-axis is not addressed.</p> <p><b>Overall Rating</b> </p>

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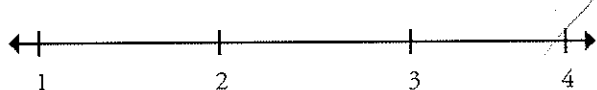


**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

<p><b>Apply and extend previous understandings of numbers to the system of rational numbers.</b></p>	<p><b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b></p>
<p><b>6.NS.6c</b></p> <p>6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position <u>pairs of integers and other rational numbers on a coordinate plane.</u></p>	<p>Important Mathematical Ideas </p> <p>Skills and Procedures </p> <p>Mathematical Relationships </p> <p><b>Summary / Justification / Evidence</b></p> <p><i>Students plot points and ordered pairs on number lines and coordinate planes. See, for example, various rat and eqs.</i></p>
<p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p> <p><i>6-5 no</i></p> <p><i>10-1 integers on number line</i></p> <p><i>10-3 rat. # on # line</i></p> <p><i>10-8 related problems</i></p> <p><i>10-9 coord. plane</i></p>	<p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p><b>Overall Rating</b> </p>

Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_


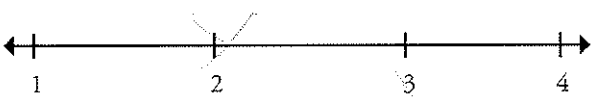
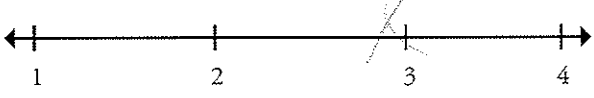

**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

Apply and extend previous understandings of numbers to the system of rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.7a</b></p> <p>7. Understand ordering and absolute value of rational numbers.</p> <p>a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret <math>-3 &gt; -7</math> as a statement that <math>-3</math> is located to the right of <math>-7</math> on a number line oriented from left to right.</i></p> <p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p> <p>10-2 10-3</p>	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b></p> <p><i>Students compare positions of +/- integers and rational numbers on a number line to determine ordering (<math>&lt;</math>, <math>&gt;</math>, <math>=</math>)</i></p> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p><b>Overall Rating</b> </p>

Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

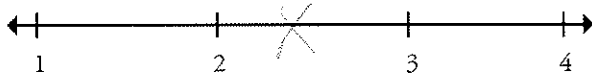

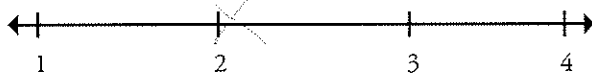
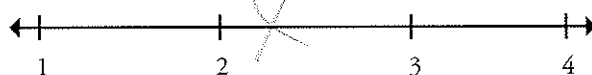
**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

Apply and extend previous understandings of numbers to the system of rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.7b</b></p> <p>7. Understand ordering and absolute value of rational numbers.</p> <p>b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write <math>-3^{\circ}\text{C} &gt; -7^{\circ}\text{C}</math> to express the fact that <math>-3^{\circ}\text{C}</math> is warmer than <math>-7^{\circ}\text{C}</math>.</p>	<p>Important Mathematical Ideas </p> <p>Skills and Procedures </p> <p>Mathematical Relationships </p> <p><b>Summary / Justification / Evidence</b></p> <p><i>Some real-world problems involving ordering of rational numbers</i></p>
<p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p> <p><i>10-2</i></p> <p><i>10-3</i></p>	<p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p><i>could be more - real world examples for conceptualization</i></p> <p><i>could have opportunities to practice</i></p> <p><b>Overall Rating</b> </p>

Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_


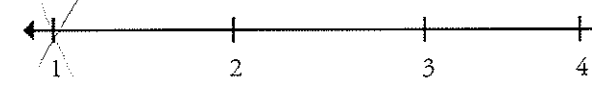

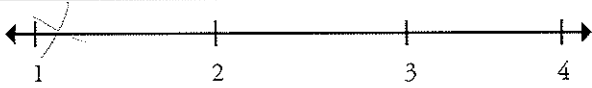
**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

Apply and extend previous understandings of numbers to the system of rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.7c</b></p> <p>7. Understand ordering and absolute value of rational numbers.</p> <p>c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of –30 dollars, write <math> -30  = 30</math> to describe the size of the debt in dollars.</i></p> <p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p> <p>10-1 10-5 10-6 NP</p>	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b>  <i>BOOK EXPLAINS ABSOLUTE VALUE AS (DISTANCE FROM 0) MARKED ON NUMBER LINE.</i></p> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b>  <i>NOT MUCH REAL-WORLD APPLICATION...</i></p> <p><b>Overall Rating</b> </p>

[REDACTED]

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**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**


<p>Apply and extend previous understandings of numbers to the system of rational numbers.</p>	<p>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</p>
<p><b>6.NS.7d</b></p> <p>7. Understand ordering and absolute value of rational numbers.</p> <p>d. Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i></p>	<p>Important Mathematical Ideas </p> <p>Skills and Procedures </p> <p>Mathematical Relationships </p> <p>Summary / Justification / Evidence</p>
<p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p> <p>10-6</p>	<p>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</p> <p>NO EXPLICIT INSTRUCTION IN DIFFERENCE</p> <p>Overall Rating </p>

[REDACTED]

*Alfred*

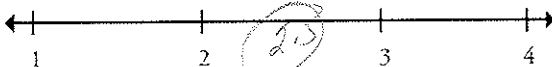
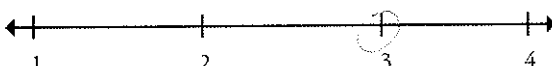

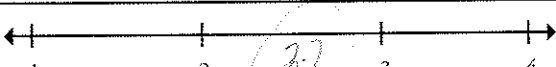
**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

<p>Apply and extend previous understandings of numbers to the system of rational numbers.</p>	<p>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</p>
<p><b>6.NS.8</b></p> <p>Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. <u>Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</u></p>	<p>Important Mathematical Ideas </p> <p>Skills and Procedures </p> <p>Mathematical Relationships </p> <p><b>Summary / Justification / Evidence</b></p> <p>STUDENTS GRAPH POINTS IN ALL QUADRANTS</p>
<p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p> <p>10-9</p> <p>10-10</p>	<p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p>IT'S HARD TO FIND DISTANCES BETWEEN POINTS</p> <p><b>Overall Rating</b> </p>

Reviewed By: 


Title of Instructional Materials: Envision Math

**MATHEMATICS: GRADE 6 – THE NUMBER SYSTEM – 6.NS**

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.NS.1</b></p> <p>Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for <math>(2/3) \div (3/4)</math> and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that <math>(2/3) \div (3/4) = 8/9</math> because <math>3/4</math> of <math>8/9</math> is <math>2/3</math>. (In general, <math>(a/b) \div (c/d) = ad/bc</math>.) How much chocolate will each person get if 3 people share <math>1/2</math> lb of chocolate equally? How many <math>3/4</math>-cup servings are in <math>2/3</math> of a cup of yogurt? How wide is a rectangular strip of land with length <math>3/4</math> mi and area <math>1/2</math> square mi?</i></p> <p><i>Problem solving not rigorous</i></p> <p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p> <p><i>162-209 6-81 Multiplication 126-127 164-165 246-249 226-227, 222-223 Integers</i></p>	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b></p> <p><i>imp math ideas w/ evident</i></p> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p><i>6.NS.2 missing + word problems 6.NS.4 missing = Dist prop 6.NS.6 missing 6.NS.8 missing</i></p> <p><b>Overall Rating</b> </p>





Reviewed By: 

Title of Instructional Materials:

EnVision - Grade 6

## Documenting Alignment to the Standards for Mathematical Practice

### 1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Reviewed 2010 Hardcover text.

Reviewer binder did not have SE material included.

Indicate the chapter(s), section(s), or page(s) reviewed.

See notes  
for 1-8  
math practice  
for Grade 5.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

## Documenting Alignment to the Standards for Mathematical Practice

### 2. Reason abstractly and quantitatively.

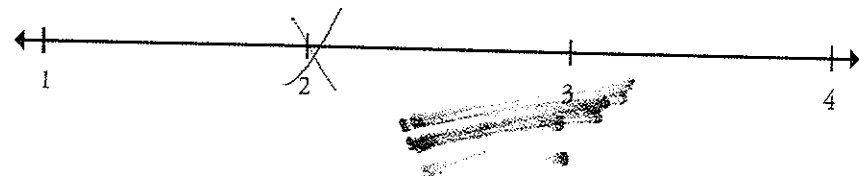
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

## Documenting Alignment to the Standards for Mathematical Practice

### 3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

## Documenting Alignment to the Standards for Mathematical Practice

### 4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

*Some questions  
that had potential were  
just superficial.*

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

## Documenting Alignment to the Standards for Mathematical Practice

### 5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

## Documenting Alignment to the Standards for Mathematical Practice

### 6. Attend to precision.

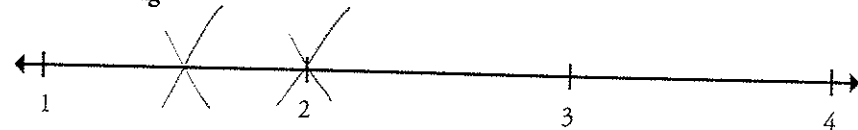
Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

## Documenting Alignment to the Standards for Mathematical Practice

### 7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see  $7 \times 8$  equals the well remembered  $7 \times 5 + 7 \times 3$ , in preparation for learning about the distributive property. In the expression  $x^2 + 9x + 14$ , older students can see the 14 as  $2 \times 7$  and the 9 as  $2 + 7$ . They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see  $5 - 3(x - y)^2$  as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers  $x$  and  $y$ .

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating





Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

## Documenting Alignment to the Standards for Mathematical Practice

### 8. Look for and express regularity in repeated reasoning.

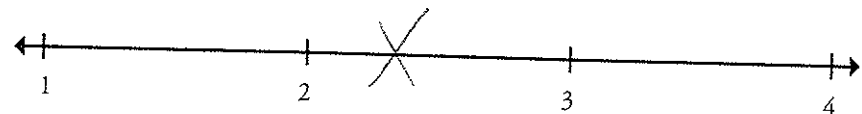
Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation  $(y - 2)/(x - 1) = 3$ . Noticing the regularity in the way terms cancel when expanding  $(x - 1)(x + 1)$ ,  $(x - 1)(x^2 + x + 1)$ , and  $(x - 1)(x^3 + x^2 + x + 1)$  might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

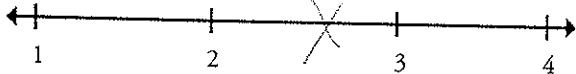
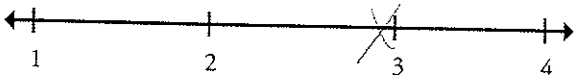
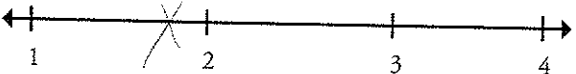
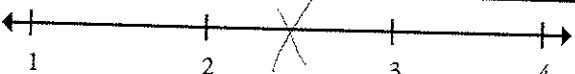
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Title of Instructional Materials: \_\_\_\_\_


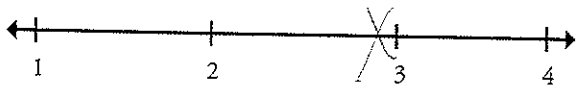
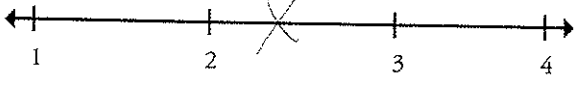
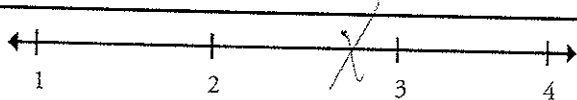
**MATHEMATICS: GRADE 6 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 6.RP**

Understand ratio concepts and use ratio reasoning to solve problems.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.RP.1</b></p> <p>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."</i></p> <p><i>The book seems to throw a concept @ students w/o development. Everything is superficial – not rigorous</i></p> <p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p>	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b></p> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p><b>Overall Rating</b> </p>

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Title of Instructional Materials: \_\_\_\_\_


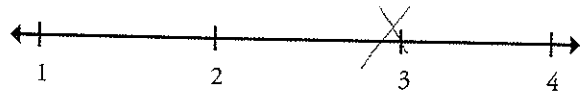
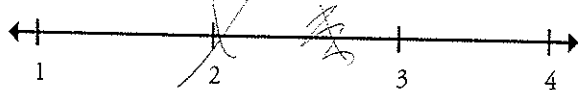

**MATHEMATICS: GRADE 6 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 6.RP**

<p><b>Understand ratio concepts and use ratio reasoning to solve problems.</b></p>	<p><b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b></p>
<p><b>6.RP.2</b></p> <p>Understand the concept of a unit rate <math>a/b</math> associated with a ratio <math>a:b</math> with <math>b \neq 0</math>, and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is <math>3/4</math> cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."<sup>1</sup></p> <p><sup>1</sup> Expectations for unit rates in this grade are limited to non-complex fractions.</p> <p><b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b></p>	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b></p> <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p> <p><b>Overall Rating</b> </p>

Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

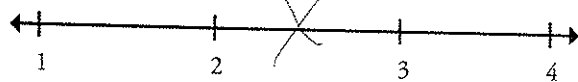
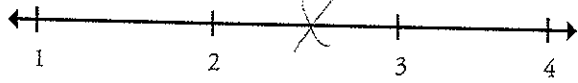
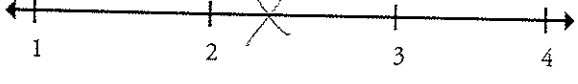
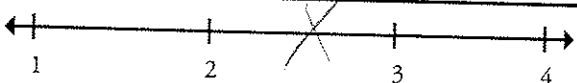
**MATHEMATICS: GRADE 6 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 6.RP**

<b>Understand ratio concepts and use ratio reasoning to solve problems.</b>	<b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b>
<b>6.RP.3a</b>  3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.  a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	<p><b>Important Mathematical Ideas</b> </p> <p><b>Skills and Procedures</b> </p> <p><b>Mathematical Relationships</b> </p> <p><b>Summary / Justification / Evidence</b></p>
<b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b>	<b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b>
	<b>Overall Rating</b> 

Reviewed By: \_\_\_\_\_

Title of Instructional Materials: \_\_\_\_\_

**MATHEMATICS: GRADE 6 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 6.RP**

<b>Understand ratio concepts and use ratio reasoning to solve problems.</b>	<b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b>
<b>6.RP.3b</b>  3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.  b. Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i>	<p>Important Mathematical Ideas </p> <p>Skills and Procedures </p> <p>Mathematical Relationships </p> <p>Summary / Justification / Evidence</p>
<b>Indicate the chapter(s), section(s), and/or page(s) reviewed.</b>	<p>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</p>   <p>Overall Rating </p>

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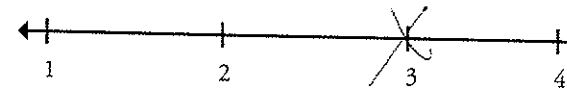
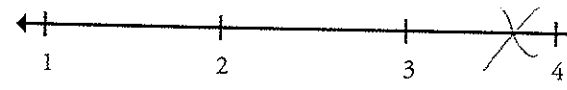
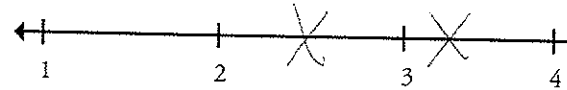
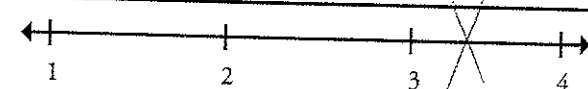
**MATHEMATICS: GRADE 6 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 6.RP**

<p><b>Understand ratio concepts and use ratio reasoning to solve problems.</b></p> <p><b>6.RP.3c</b></p> <p>3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.</p>  <p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p>	<p><b>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</b></p> <div> <p>Important Mathematical Ideas</p> </div> <div> <p>Skills and Procedures</p> </div> <div> <p>Mathematical Relationships</p> </div> <p><b>Summary / Justification / Evidence</b></p>  <p><b>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</b></p>  <p><b>Overall Rating</b></p>
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**MATHEMATICS: GRADE 6 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 6.RP**

Understand ratio concepts and use ratio reasoning to solve problems.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
<p><b>6.RP.3d</b></p> <p>3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p>       <p>Indicate the chapter(s), section(s), and/or page(s) reviewed.</p>	<div>Important Mathematical Ideas </div> <div>Skills and Procedures </div> <div>Mathematical Relationships </div> <div>Summary / Justification / Evidence</div>
	<p>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</p>   <div>Overall Rating </div>

⊕ Seems like a basic book.

⊕ Problem solving is available, but not developed.

⊕ The lessons are fast & furious — 140 in all.

⊕ Lessons w/o "Additional Examples" lack "meat" and don't seem to fit well w/ the 8 rubric questions.

It grew on me, but I didn't like it.